MAXWELL JONES

3101 Pine Oaks Way, Herndon VA 20171
631-804-4114
Website: maxwelljon.es
maxwelljonesnova@gmail.com

EDUCATION

Bachelor of Science, Artificial Intelligence and Math   **2019-Present**
Carnegie Mellon University '23, Pittsburgh, PA   **GPA: 4.0**
- Fundamentals of Programming and Computer Science, Principles of Imperative Computation
- Calculus I, II, Linear Algebra, Physics I, II
- Principles of Macro/Micro Economics, US History

High School Graduate   **2015-2019**
Thomas Jefferson High School for Science and Technology, Alexandria, VA   **GPA: ~3.6**
- Multivariable Calculus, Complex Analysis, Differential Equations

STRENGTHS AND PROJECTS

Coding

- Python, Java, SQL, Julia, Javascript, HTML, Sklearn, Keras, NumPy
- Proficient with neural networks, random forests, pathfinding algorithms (Dijkstra, A*), Traveling Salesmen Problem, Game AIs (heuristic, negamax, alpha-beta pruning)

Projects

- Helped create **WalkSafe**, a program that outputted **Safe and Efficient** walking paths given a start and end point at night in dangerous areas, using a maps API, A*, and crime data at **TartanHacks 2019**
- Competed in an online AI housing competition, implementing **random forests** through Sklearn.
- Coded an algorithm that played a game of **Othello** against a human using a heuristic and negamax/alpha beta pruning for finding new moves.
- Used Python to make a **two-layer neural network** with six hidden nodes without the use of libraries. I used this network to test my understanding of neural networks.
- Created a program to calculate plus/minus for basketball lineups, given when players came in and out of games and when teams scored (implemented for my varsity high school basketball team).

LEADERSHIP AND EXPERIENCE

College
- Treasurer for SPIRIT, CMU's Black Student Orginization
- Club Basketball
- CMU SCS Social Media Ambassador
- TA for 15-151: A discrete math course for freshman in CMU's School of Computer Science

Fiat Chrysler Automobiles Internship   **Summer 2020**
- Worked with the data science team to optimize the HR Absenteeism prediction model
- Used idea behind Meta Analysis to add cross referenced variables across plants to model

Origami
- Wrote a column on young origamists in *The Paper,* a national origami magazine.
- Created an origami website for young origamists to share work.
- Taught origami in multiple countries across three continents.

Personal Computer Science and AI Tutor
- Group tutor for high school/middle school students in an introductory course about Java.
- One-on-one tutor for students in AI using Python.